Info-Hams Digest   Sat, 1 May 93   Volume 93 : Issue 524

Today's Topics:
                    Another AM Question (2 msgs)
                     Comments on Dual Band HTs
                  Differential equations and power.
                    FCC Rules on Transmission
                     help: IC245 SSB adaptor
                         SAREX Packet Ops
                          sat work on ht
                        Sellers Beware!!!
                   STS-55 Element Set GSFC-013

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 30 Apr 93 21:12:04 -0500 (CDT)
From: speedway.net!hatter@uunet.uu.net
Subject: Another AM Question
To: info-hams@ucsd.edu

> From: alanb@sr.hp.com (Alan Bloom)

[... content stuff deleted ...]

> <Flame on:>
> It's a shame that people don't check their facts with a
more-knowledgable
> colleague before they confidently assert them on the net.
> <Flame off>

Question: What else must be checked and with whom before a post?

[... stuff of argumentative content ...]

> Wrong. The flying receiver would see sidebands at the frequency of its
> revolution rate. (A VERY fast airplane!)

Now, let's see if I have this right. You take an unmodulated carrier,
propagate it with directionality, and then rotate the signal about an axis
perpendicular to propagation axis. Next you board a speedy jet and
follow the maxima of the beam looking for the signal and modulation
components. Flying in this manner, do you see both the carrier and
some sidebands, or at least "sidebands".

If so, we have a new phenomena. Change the scenario just a tad. Mount
your
receiver on an extension of the x-element beam's boom and measure the
frequency received. If you have some other than just the carrier at the
frequency of the non-rotating signal, then a few texts will have to be
rewritten.

73
Henry
n5shl

Date: Fri, 30 Apr 1993 18:41:48 GMT
From: usc!cs.utexas.edu!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpfcso!
myers@network.UCSD.EDU
Subject: Another AM Question
To: info-hams@ucsd.edu

I know I shouldn't do this (it's somewhat like dumping gasoline on a
raging fire), BUT........

Every so often, someone figures out an AMAZINGLY simple way to do
zero-bandwidth communictions; all you gotta do is use polarization
modulation! For a simple example, mount a pair of beams, one vertical
and one horizontal; switch between the two to send CW! Go a little faster
with the switch, and send anything you want...at ZERO bandwidth!

Now, for extra credit, figure out what's wrong with the above, and how it
relates to the original question. (And PLEASE, let's not have everyone
posting the answer...this is something I'd like some people to think about

for a while, OK?)

Bob Myers KC0EW   Hewlett-Packard Co. |Opinions expressed here are not
                    Systems Technology Div. |those of my employer or any other
myers@fc.hp.com   Fort Collins, Colorado |sentient life-form on this planet.

Date: 30 Apr 93 08:56:02 MDT
From: portal!lhaven.UUmh.Ab.Ca!Lawrence_Chen@uunet.uu.net
Subject: Comments on Dual Band HTs
To: info-hams@ucsd.edu

I'm about to write my test, its on Wednesday. I reckon that I'll pass with
no problem, my only regret is that I waited so long before taking one. My
friends kept telling me that I would probably find the material easy.

Anyways, as soon as I'm legal, I'm thinking about getting a Dual Band HT.

But reading all those magazine ads is starting to confuse me, they all have
different ideas on what kind of specs to provide so that one can't directly
compare them side by side.

So, I'd like to get comments from people who know something about these
HTs.

Right now I'm looking at the various ICOM offerings (24AT, W21AT, W2A), the
FT530 & FT470 from Yeasu, the Alinco DJ580T, and the Kenwood TH78A.

Some pointers on what would be important and what wouldn't be would be
appreciated also.

Since this will probably be the only radio I get for a long time, since as
soon as a certain somebody finds out what I'm spending.....things will
be......

Paging features or tone squelch might be something I need, depending on how
the Emergency Preparedness setup gets done.

-- Via DLG Pro v0.995

 "Just a Crazy Engineer with an Amiga and an HP48sx"   - The Dreamer
 Email: dreamer@lhaven.uumh.ab.ca or "Lawrence Chen" @ 1:134/3002
 PHONE: +1 403 526 6019   FAX: +1 403 529 5102   CIS: 74200,2431
 Lunatic Haven BBS (1:134/3002):   +1 403 526 6957 (14,400 HST/v.32bis)

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 Lunatic Haven BBS (UUCP):            +1 403 526 5035 (Telebit Worldblazer)
 Praxis Society K12 BBS (1:134/3003): +1 403 529 1610 (Telebit T2500SA)
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Date: Sat, 1 May 1993 01:45:41 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
zaphod.mps.ohio-state.edu!swrinde!cs.utexas.edu!utnut!torn!csd.unb.ca!
news.ucs.mun.ca!kean.ucs.mun.ca!jcraig@network.UCSD
Subject: Differential equations and power.
To: info-hams@ucsd.edu

In article <C69GHG.193@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom) writes:
> William J. Bencze (bencze@isl.stanford.edu) wrote:
> : >> On 28 Apr 93 16:32:20 CDT, dadams@cray.com (David Adams) said:
>
> : > Durring the disscussion of how current leads voltage in an inductor
> : > by a phase angle of 90deg, It is apparent that there are a few
> : > differential equations lying just below the surface here, that might
> : > help explain the subject to a mathophile like my self. Have any of
> : > you ever seen the subject presented that way? Does it lead to
> : > a mathimatical explaination of how phase angles are calculated?
>
> : i = C dv/dt   and   v = L di/dt (ref: physics/EE/ARRL Handbook)
>
> ..
>
> : Therefore, in a capacitor, current leads voltage, while in an inductor,
> : voltage leads current.
>
> A useful mnemonic is
>
>   ELI the ICE man
>
> i.e. Voltage (E) leads current (I) in an inductor (L)
>   Current (I) leads voltage (E) in a capacitor (C)
>
> AL N1AL
>
Or how about "I before E except after C and in inductive circuits" ?

Joe, VO1NA

Date: Fri, 30 Apr 1993 19:38:35 GMT
From: usc!zaphod.mps.ohio-state.edu!saimiri.primate.wisc.edu!
usenet.coe.montana.edu!news.uoregon.edu!netnews.nwnet.net!spiff.seattleu.edu!

thebes!ole!ssc!markz@network.UCSD.EDU
Subject: FCC Rules on Transmission
To: info-hams@ucsd.edu

Myron A. Calhoun (mac@cis.ksu.edu) wrote:
: In the "cb" and "broadcast" (both AM and FM) bands, I recall the
: power limitation is 100 MILLIwatts (one-tenth of a watt); there may
: be other rules, too, but I'm NOT a lawyer, so....

I'm not either, but I do have a copy of part 15.

AM broadcast band (15.219)
100 milliwatts input power.

CB (operating under part 15.227)
10000 microvolts/meter at 3 meters

FM broadcast band (15.239)
250 microvolts/meter at 3 meters. You stick this one in the
antenna equations, and you get a radiated power of something
like 30 nanowatts. Good for 50 feet or so.

Mark Zenier markz@ssc.wa.com markz@ssc.com

Date: 1 May 1993 02:52:55 GMT
From: news.mtholyoke.edu!mhc.mtholyoke.edu!pryack@uunet.uu.net
Subject: help: IC245 SSB adaptor
To: info-hams@ucsd.edu

I'm looking for info about a SSB adaptor for an Icom IC-245 2 meter radio.
Does anybody have one looking for a new home? 73 de W1ETH

--
Paul R. Ryack, M.D., M.P.H. |pryack@mhc.mtholyoke.edu
                    |W1ETH@K1MEA.#WMA.MA.USA.
There are certain sections of |fax: (413)532-9141
New York, Major, that I wouldn't|
advise you to try and invade. |

Date: 1 May 93 02:20:02 GMT
From: news-mail-gateway@ucsd.edu
Subject: SAREX Packet Ops
To: info-hams@ucsd.edu

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SB SAREX @ AMSAT $STS-55.016
SAREX Packet Ops

May 1, 1993 @ 02:00
To all radio amateurs:

The SAREX Operations team at the Johnson Space Center have recently drafted
a flight note to the STS-55 crew asking them to turn on the SAREX packet
robot.  This has been approved by the Shuttle flight operations team and
has been uplinked to the crew.  While the SAREX Working Group cannot
guarantee that the packet robot will be turned on, we anticipate that it
will be operating over the next few days.

SAREX packet operations are conducted on the following frequencies:

Downlink:    145.55 MHz
Uplink:      144.49 MHz

Please listen on the downlink frequency for Shuttle packet activity BEFORE
sending uplink packets.

Station Callsign:  W5RRR-1

Those of you who have been listening to the Shuttle downlink from NASA
select and WA3NAN are well aware that NASA has made a concerted effort over
the past few days to conserve power on the Shuttle.  This was being
performed in an attempt to extend the mission an additional day.  SAREX
packet activity has been also curtailed over the past few days as part of
this power conservation effort.  Although this power conservation activity is
still in progress, the crew was given the go ahead to turn on the packet
robot.

Good luck and 73,

Frank H. Bauer, KA3HDO for the SAREX working group

/EX

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Date: 1 May 1993 01:59:39 GMT
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!cleveland.Freenet.Edu!
ag447@network.UCSD.EDU
Subject: sat work on ht
To: info-hams@ucsd.edu

what are the best ht's that will work voice on the oscars
--
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when I die I am really going to remember THIS! life

Date: 28 Apr 93 22:33:00 GMT
From: swrinde!gatech!destroyer!cs.ubc.ca!alberta!adec23!ersys!freddy!
shaun.merrigan@network.UCSD.EDU
Subject: Sellers Beware!!!
To: info-hams@ucsd.edu

TO: all

In rec.radio.swap, don@fatcity.cts.com (Don Hamiel) writes:

> Be leary of aperson by the name of Steve Parrish in Lancaster,
  New Hampshire....

I wonder if the infamous Mike Kirby of Florida has moved north??

Last I heard there was a class action suit pending against this
fellow. Does anyone know how it turned out???

73's

Shaun

shaun.merrigan@freddy.ersys.edmonton.ab.ca (Shaun Merrigan)

 . DeLuxe./386 1.25 #974sa .

Date: 1 May 93 02:56:37 GMT
From: news-mail-gateway@ucsd.edu
Subject: STS-55 Element Set GSFC-013
To: info-hams@ucsd.edu

SB SAREX @ AMSAT $STS-55.017
STS-55 Element Set GSFC-013

Enclosed is the latest Keplerian data for STS-55 as generated by
Ron Parise, WA4SIR at the Goddard Space Flight Center. Gil Carman, WA5NOM
reports that the RCS burn performed yesterday has allowed the Shuttle to more
closely follow the orbit it was placed in near the beginning of launch. As
such, element set GSFC-013 is currently 4 seconds later than the prelaunch

element set JSC-007.

Gil Carman also reports that the lower central U.S. will have good visible
passes before sunrise each morning, starting Sunday.

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 STS-55
 1 22640U 93 27  A 93120.62020368 0.00044855  00000-0  12708-3 0   131
 2 22640  28.4606 239.1107 0011268 287.1577  72.7801 15.91747408   652
```

 Satellite: STS-55
 Catalog number: 22640
 Epoch time: 93120.62020368   (00 MAY 93   14:53:05.60 UTC)
 Element set: GSFC-013
 Inclination: 28.4606 deg
 RA of node: 239.1107 deg   Space Shuttle Flight STS-55
 Eccentricity: 0.0011268   Keplerian Elements
 Arg of perigee: 287.1577 deg
 Mean anomaly: 72.7801 deg
 Mean motion: 15.91747408 rev/day   Semi-major Axis: 6675.5251 Km
 Decay rate: 0.45E-03 rev/day*2   Apogee Alt: 304.66 Km
 Epoch rev: 65   Perigee Alt: 289.62 Km

 NOTE - This element set is based on NORAD element set # 013.
         The spacecraft has been propagated to the next ascending
         node, and the orbit number has been adjusted to bring it
         into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

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End of Info-Hams Digest V93 #524
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